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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,301	07/28/2003	Lewis B. Aronson	15436.247.2.1.3	6453
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	0 EAST SOUTH TEMPLE 000 EAGLE GATE TOWER		ART UNIT	PAPER NUMBER
	CITY, UT 84111		2613	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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		Application No.	Applicant(s)			
Office Action Summary		10/629,301	ARONSON ET AL.			
		Examiner	Art Unit			
		Hanh Phan	2613			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Donsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period or re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing end patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 36(a). In no event, however, may a re will apply and will expire SIX (6) MONT accuse the application to become ABA	ATION.  Only be timely filed  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 28 Ju	<u>uly 2003</u> .				
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)□						
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.			
Disposit	ion of Claims					
4)⊠ 5)⊠ 6)⊠ 7)□	Claim(s) <u>24-43</u> is/are pending in the applicatio 4a) Of the above claim(s) is/are withdraw Claim(s) <u>39-43</u> is/are allowed. Claim(s) <u>24-38</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.				
Applicat	ion Papers					
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>28 July 2003</u> is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	□ accepted or b) □ object drawing(s) be held in abeyand tion is required if the drawing(s).	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).			
<b>Priority</b>	under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
A44	**************************************					
2) Noti 3) Info	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	Paper No(s	ummary (PTO-413) /Mail Date formal Patent Application _			

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 24 and 26-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Jiang et al (US Patent No. 6,665,498).

Regarding claim 24, referring to Figure 2, Jiang et al teaches a transceiver module (i.e., optical transceiver 210, Fig.2), comprising:

a ROSA (i.e., optical receiver 216, Fig. 2);

a TOSA (i.e., optical transmitter 220, Fig. 2);

receive path eye opener circuitry (i.e., ASIC 212, Fig. 2) including a first input and output and configured so that a first data stream received from the ROSA has a lower jitter at the first output than at the first input (i.e., 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48);

receive path bypass circuitry (i.e., ASIC 212, Fig. 2) configured so that when the first data stream has a data rate less than about 10Gb/s, the first data stream bypasses

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the receive path eye opener circuitry along a first bypass path (i.e., 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48);

transmit path eye opener circuitry (i.e., ASIC 212, Fig. 2) including a second input and output and configured so that a second data stream has a lower jitter at the second output than at the second input (i.e., 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48); and

transmit path bypass circuitry (i.e., ASIC 212, Fig. 2) configured so that when the second data stream has a data rate less than about 10Gb/s, the second data stream bypasses the transmit path eye opener circuitry along a second bypass path, the second bypass path being in communication with the TOSA (i.e., 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

Regarding claim 26, Jiang et al further teaches bypass of the receive path eye opener circuitry and transmit path eye opener circuitry occurs at a data rate of about 8.5Gb/s (i.e.,Fig. 2, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

Regarding claim 27, Jiang et al further teaches at least one of the receive path bypass circuitry and the transmit path bypass circuitry comprises: a CDR; and a retimer (i.e., Fig. 2, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

Regarding claim 28, Jiang et al further teaches at least one of the receive path bypass circuitry and the transmit path bypass circuitry comprises one of: a passive equalization circuit; and an active equalization circuit (i.e., Fig. 2, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

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Regarding claim 29, Jiang et al further teaches the transmit path eye opener circuitry and the receive path eye opener circuitry are data rate responsive (i.e., Fig. 2, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

Regarding claim 30, Jiang et al further teaches bypass of the receive path eye opener circuitry and transmit path eye opener circuitry can be implemented in at least one of the following ways: manually; and, automatically (i.e., Fig. 2, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

Regarding claim 31, Jiang et al further teaches bypass of the receive path eye opener circuitry and transmit path eye opener circuitry occurs for a range of data rates less than about 10Gb/s (i.e., Fig. 2, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

Regarding claim 32, Jiang et al further teaches the receive path eye opener circuitry and receive path bypass circuitry collectively comprise a receiver eye opener IC; and the transmit path eye opener circuitry and transmit path bypass circuitry collectively comprise a transmitter eye opener IC (i.e., Fig. 2, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

Regarding claim 33, Jiang et al further teaches the receiver eye opener IC and transmitter eye opener IC each comprise circuitry for a plurality of eye openers, each of the plurality of eye openers being configured to operate in connection with a predetermined data rate or predetermined range of data rates (i.e., Fig. 2, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

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## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 25 and 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiang et al (US Patent No. 6,665,498) in view of Sheth et al (Pub. No.: US 2004/0033079).

Regarding claims 25 and 35, Jiang et al differs from claim 25 in that he fails to specifically teach the transceiver module is substantially compliant with the XFP MSA. Sheth et al, from the same field of endeavor likewise teaches an optical transceiver (Figures 1-3). Sheth et al further teaches the transceiver module is substantially compliant with the XFP MSA (i.e., Figure 2, pages 3 and 4, paragraphs [0038]-[0044]). Based on this teaching, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the transceiver module is substantially compliant with the XFP MSA as taught by Sheth et al in the system of Jiang et al. One of ordinary skill in the art would have been motivated to do this since allowing reducing size, weight, power consumption and cost of the whole system.

Regarding claims 34 and 36, the combination of Jiang et al and Sheth et al teaches the transceiver module is compatible with the Fibre Channel protocol (i.e., Figure 2 of Sheth et al, pages 3-5, paragraphs [0038]-[0054]).

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Regarding claim 37, the combination of Jiang et al and Sheth et al teaches bypass of the receive path eye opener circuitry and transmit path eye opener circuitry can be implemented in at least one of the following ways: manually; and, automatically (i.e., Fig. 2 of Jiang et al, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

Regarding claim 38, the combination of Jiang et al and Sheth et al teaches bypass of the receive path eye opener circuitry and transmit path eye opener circuitry occurs for at least one other data rate in addition to the about 8.5Gb/s data rate (i.e., Fig. 2 of Jiang et al, col. 3, lines 34-67, col. 4, lines 1-67 and col. 5, lines 1-48).

## Allowable Subject Matter

5. Claims 39-43 are allowed.

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gentile (US Patent No. 7,031,615) discloses optical transmission system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

HANH PHAN
PRIMARY EXAMINER